

Begins

Reel # 269

Krylova, O. A.

KRYLOVA, O. A.; NIKISHINA, T. M.; SHILYAGINA, N. N.; VOLOKHOV, A. A. (Moskva)

K voprosu o stanovlenii i razvitii retikulyarnoy formatsii stvola
golovnogo mozga v ontogeneze.

report submitted for the First Moscow Conference on Reticular Formation,
Moscow, 22-26 March 1960.

KRYLOVA, O. I.

"Characteristics of the clinic of typhoid-paratyphoid diseases
in syntomycin treatment."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

SOKOLOVSKAYA, Ya.I.; KOZLOVA, A.A.; SMIRNOVA, S.A.; KRYLOVA, O.M.;
GLAZKOVA, T.S.; ALEKSANDROVA, V.R.; KAPETANAKI, K.G.

Viacheslav Viktorovich Kosmachevskii; on his 75th birthday. Zhur.
mikrobiol., epid.i immun. 33 no.4:154-155 Ap '62. (MIRA 15:10)
(KOSMACHEVSKII, VIACHESLAV VIKTOROVICH, 1887-).

KRYLOVA, O.M.

Changes in the sensitivity of typho-paratyphoid pathogens during treatment with some antibiotics. Trudy LSGMI 46:169-177 '59.

(MIRA 13:11)

1. Kafedra infektsionnykh bolezney Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. V.V. Kosmachevskiy i kafedra mikrobiologii (zav. kafedroy - prof. M.N. Fisher).

(SALMONELLA TYPHOSA)

(SALMONELLA PARATYPHI)

(ANTIBIOTICS)

KRYLOVA, O.M.

Treatment of typhoid fever with synthomycin. Trudy LSGMI 46:178-
184 '69. (MIRA 13:11)

1. Kafedra infektsionnykh bolezney Leningradskogo sanitarno-
gigiyenicheskogo meditsinskogo instituta (sav. kafedroy - prof.
V.V.Kosmachevskiy).
(CHLOROMYCETIN) (TYPHOID FEVER)

KRYLOVA, O.M.

Effectiveness of levomycetin in the treatment of typhoid and paratyphoid diseases. Zdrav. Bel. 5 no.5:9-11 My '59 (MIRA 12:8)

1. Kafedra infektsionnykh bolezney Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zaveduyushchiy kafedry - prof. V.V. Kosmachevskiy) na baze bol'nitsy im. S.P. Botkina (glavnyy vrach M.M. Figurina).

(TYPHOID FEVER) (PARATYPHOID FEVER)
(CHLOROMYCETIN)

MAKAROVA, Ye.I.; KRYLOVA, O.M.

Use of Galperin's method in diagnosing infectious diseases.

Zhur.mikrobiol.epid. i immun. 30 no.5:140 My '59.

(MIRA 12:9)

1. Iz Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(DIAGNOSIS)

KRYLOVA, O.H.

Urine color sedimentation test in typhoid and paratyphoid diseases treated with antibiotics. Kaz.med.zhur. 40 no.3: 35-38 My-Je '59. (MIRA 12:11)

1. Iz kliniki infektsionnykh bolezney (zav. - prof.V.V.Kosmachevskiy) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta, na baze bol'nitsy im. S.P.Botkina (glavvrach - M.H. Figurina).

(URINE--ANALYSIS AND PATHOLOGY)
(TYPHOID FEVER)
(ANTIBIOTICS)

KRYLOVA, O. M., Cand Med Sci (diss) -- "The effect of antibiotics on the clinical manifestations of typhus-paratyphus infections". Leningrad, 1960. 21 pp (Min Health RSFSR, Leningrad Sanitary-Hygiene Med Inst), 300 copies (KL, No 14, 1960, 137)

KOMAROVA, G. F.

PA 244T50

USSR/Medicine - Relapsing Fever

Mar 53

"Experiments on the Specific Therapy of Caucasian Tick-Transmitted Relapsing Fever," R. R. Gel'tser, O. P. Krylova, V. N. Bednova, Chair of Microbiology, Stevropol' Med Inst

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 3, p 79

Shown in experiments on guinea pigs that neither white streptococci, guanine, nor methylene blue have a therapeutic effect on Caucasian tick-transmitted relapsing fever. Sulfidine has a therapeutic effect only in toxic (lethal) doses. Penicillin

244T50

also has a therapeutic effect only in toxic doses, but the toxicity could be eliminated by administering glucose to the animals. Introduction of penicillin together with agents which impede its resorption (e.g., fish liver oil) reduces the therapeutic effect of this antibiotic.

244T50

KRYLOVA, O.P.

USSR/Medicine - Modification of
Microorganisms

Nov 53

"Data on the Investigation of Spirochete Granules. Granules of Tick-Born Spirochetes of Caucasian and Central-Asiatic Relapsing Fever as Non-Cellular Forms of These Spirochetes," R. R. Gel'tser, O. P. Krylova, Chair of Microbiol, Stavropol' Med Inst

Zhur Mikro, Epid, i Immun, No 11, pp 21-23

Transformation into filterable microgranules has been established not only in the case of bacteria, but also with reference to various species of

271535

spirochetes. Although the existence of granules of various sizes formed from spirochetes or contained in the bodies of spirochetes was known for a long time, their significance was not apparent. It has now been found that after complete disappearance of relapsing fever spirochetes, these microorganisms develop again, apparently from the grains composed of noncellular matter.

271535

KRYLOVA, O.P.

Experiments in isolating pure cultures of *Spirochaeta microdentium*;
preliminary report. Zhur.mikrobiol.epid.i immun. no.11:56-60 N '53.

(MLRA 7:1)

1. Iz kafedry mikrobiologii (zaveduyushchiy - professor R.R.Gel'tser)
Stavropol'skogo meditsinskogo instituta (direktor - dotsent P.V.Polosin).
(*Spirochaeta microdentium*)

KRYLOVA, O. P.

Dissertation: "The Cultivation of Treponema Microdentium." Cand Med Sci, Minsk
State Medical Inst, 17 Jun 54. (Sovetskaya Belorussiya Minsk, 6 Jun 54)

SO: Sum 318, 23 Dec 1954

USSR/Microbiology - General Microbiology.

F-1

Abs Jour : Ref Zhur - Biol., No 11, 1958, 47672

Author : Gal'tsior, R.R., Krylovo, O.P.

Inst : -

Title : Materials on the Study of Spirochete Granules. Communication II. Some Conditions Resulting in the Appearance of Granules on the Tick-Borne Spirochetes of Recurrent Typhoid Fever.

Orig Pub : Zh Mikrobiol. Epidemiol. i Immunobiol. No 8, 91-97 (1956).

Abstract : The appearance of granules in spirochetes, which the authors consider as generative, pre- or noncellular forms, from which coiled or cellular forms can develop on transplantation (ZhMEI, 11, 21-23 (1953)), is induced by 10% NaHCO₃ solution, 10% KU solution, and 10-50% glycerine solution, as well as by various dyes--methylene blue, gentian violet, acid and basic fuchsin, neutral red, and eosin [TN: it is not clear whether the appearance of

Card 1/2

GEL'TSER, R.R.; KRYLOVA, O.P.

Materials on the study of granules of spirochetes. Report no.2:
Some conditions inducing the appearance of granules of tick-borne
spirochetes of Caucasian and Central Asiatic relapsing fever.
Zhur.mikrobiol., epid. i immun. 27 no.6:91-97 Ag '56. (MLA 9:10)

1. Iz kafedry mikrobiologii Stavropol'skogo meditsinskogo instituta.
(BORRELIA,
recurrentis, form. of granules of tick-borne strains (Rus))

Krylova, O.P.
GML'TTSMR, R.R.; KRYLOVA, O.P.

Cultivation of different strains of tick-borne spirochetes of the
Caucasian and Central Asiatic forms of relapsing fever. Med.paraz.
i paraz.bol.supplement to no.1:49 '57. (MIRA 11:1)

1. In kafedry mikrobiologii Stavropol'skogo meditsinskogo instituta.
(SPIROCHANTA)

ARRIVED
GEL'TTSER, R.R.; KRYLOVA, O.P.

Data on granules of spirochetes. Report No.3: Antigenic properties of granules of Spirochetes of Caucasian tick-borne recurrent typhus. Zhur.mikrobiol.epid. i immun. 28 no.9:65-66 S '57. (MIRA 10:12)

1. Iz kafedry mikrobiologii Stavropol'skogo meditsinskogo instituta.
(RICKETTSIA PROWAZEKI,
antigenic properties of granules from strains causing
Caucasian tick-borne recur. typhus (Rus))

KRYLOVA, O.P.

Granules in Treponema from the mouth. Zhur.mikrobiol.epid. i immun.
29 no.3:117-119 Mr '58. (MIRA 11:4)

1. Iz kafedry mikrobiologii Stavropol'skogo gosudarstvennogo
meditsinskogo instituta.

(BORRELIA,

buccale, granules (Rus)

KRYLOVA, O.P., dotsent

Further observations on the use of the flocculation reaction with the protein of cultured *Treponema pallidum* for sero-diagnosis of syphilis. Uch. zap. Stavr. gos. med. inst. 12:172-173 '63.

Observations on the cultivation of spirochetes of tick-borne relapsing fever of the Caucasian and Central Asian forms. Ibid. 174-175 (MIRA 17:9)

1. Kafedra mikrobiologii (zav. prof. R.R. Gel'tser) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

KRYLOVA, O.P.

Observations on the cultivation of the spirochete of the Caucasian and Central Asian forms of tick-borne relapsing fever. Med. parazit. i parazit. bol. 32 no.6:659-660 N-D '63 (MIRA 18:1)

1. Iz kafedry mikrobiologii Stavropol'skogo meditsinskogo instituta.

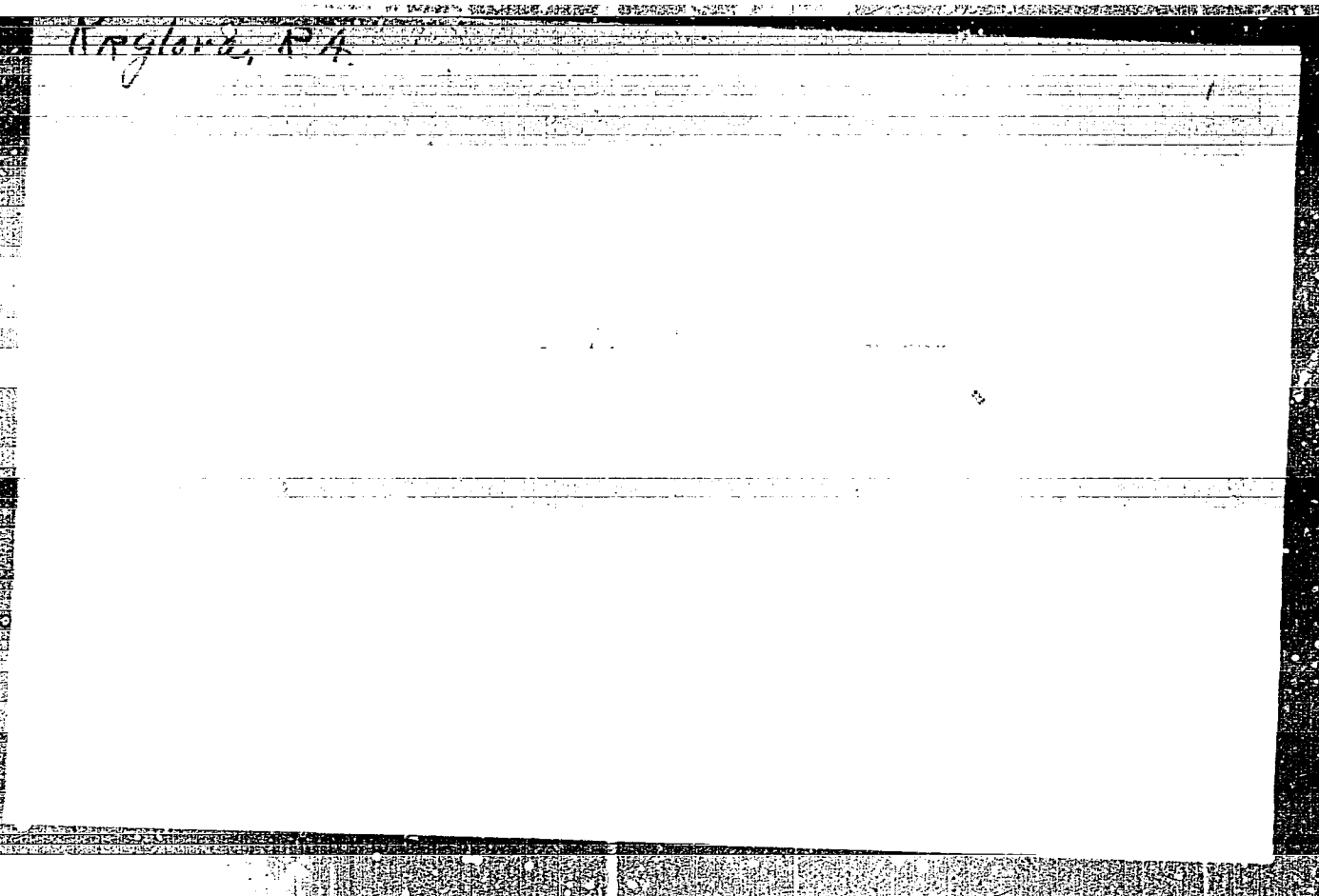
KONKIN, A.A.; KRYLOVA, R.A.; ROGOVIN, Z.A.

Effect of intermolecular interaction on the resistance of the glucoside bond in a cellulose macromolecule, to the action of hydrolyzing reagents. Koll.shur. 15 no.4:246-251 '53. (MLRA 6:8)

1. Moskovskiy tekstil'nyy institut. Kafedra iskusstvennogo volokna. (Cellulose) (Hydrolysis)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000826910001-4



APPROVED FOR RELEASE: 04/03/2001

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GAL'BRAYKH, L.S.; DRUZHININA, T.V.; KRYLOVA, R.A.

Opening of the complete scientific research laboratory
at the Department of Synthetic Fibers of the Moscow Textile
Institute. Khim.volok. no.3:78-79 '61. (MIRA 14:6)

1. Moskovskiy tekstil'nyy institut.
(Textile fibers, Synthetic—Study and teaching)

KRYLOVA, R. G.

20-6-19/48

AUTHORS: Golova, O. P., Pakhomov, A. M., Andriyevskaya, Ye. A., Krylova, R. G.

TITLE: On the Mechanism of the Thermal Decomposition of Cellulose in a Vacuum and on the Formation of 1,6-Anhydro-1,5-Glucopyranose, a Levoglucosan
(O mekhanizme termicheskogo raspada tsellyulozy v vakume i obrazovanii 1,6-angidro-1,5-glyukopiranozy - levoglyukozana)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 115, Nr 6, pp. 1122-1125 (USSR).

ABSTRACT: Hitherto there did not exist an unequivocal explanation for the formation mechanism of the substances last-mentioned in the title in thermal cellulose decompositions in a vacuum. It is true that this substance has an elementary composition of a structural-unit-member of cellulose, but it has a different hydroxyl position (at C₄ instead of C₆) and possesses 2 oxygen bridges instead of one 1 - 5. A formation mechanism of levoglucosan was suggested by Irvine and Oldham, namely through an intermediate stage of the cellulose hydrolysis as far as glucose and then a dehydration of the latter. Karrer confirmed this hypothesis by high levoglucosan yields from β - d-glucose. The above-mentioned reaction represents a special case of the thermal depolymerization of polysaccharides as far as the monomer. The authors thought it necessary to perform such investigations which are suitable to furnish data for the solution of principal problems. Such principal

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On the Mechanism of the Thermal Decomposition of Cellulose in a Vacuum and on the Formation of 1,6-Anhydro-1,6-Glucopyranose, a Levoglucosan. 20-6-19/48

problems are: 1) To attain a constant yield of levoglucosan in this connection, 2) the possibility of the formation of levoglucosan from β - d-glucose, 3) the influence exerted by the physical structure (compactness of the packing) of cellulose on its thermal decomposition and 5) the influence of the degree of polymerization. The following conclusions were drawn from the results of the work: 1) The small yield of levoglucosan from the thermal decomposition of an easily hydrolyzable cellulose, the glucose and the cellobiose with admixture of glucose, disproves the possibility of the existence of intermediate stages of the glucose-formation and the glucose-dehydration as far as levoglucosan, as an intermediate stage in the formation of levoglucosan from cellulose. These facts do not confirm the conception, spread in publications, on the mechanism of a hydrolytic dehydration-formation of levoglucosan. 2) The substantial yield in the formation of levoglucosan (55-60%) is only attained when a certain chain-length of the cellulose macromolecule exists. Moreover a more compact cellulose-structure (packing) is necessary for this. The formation process of levoglucosan includes

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On the Mechanism of the Thermal Decomposition of Cellulose in a 20-6-19/48
Vacuum and on the Formation of 1,6-Anhydro-1,5-Glucopyranose, a Levoglucosan.

the decomposition of the cellulose molecule on the 1,4- β -glucose bonds, as well as a subsequent isomerization of the resulting chain fragment into a levoglucosan molecule. The chief conclusion can be extended to the thermal decomposition of other polysaccharides, and probably also to other types of polymers.
There are 1 figure, 2 tables and 1 Slavic reference.

ASSOCIATION: Institute for Organic Chemistry AN USSR imeni N. D. Zelinskiy and
Forestry Institute AN USSR (Institut organicheskoy khimii imeni N. D.
Zelinskogo Akademii nauk - Institut lesa Akademii nauk SSSR.).

PRESENTED: By I. N. Nazarov, Academician, June 7, 1957

AVAILABLE: Library of Congress

Card 3/3

KRYLOVA, R. G.

AUTHORS:

Golova, O. P., and Krylova, R. G.

20-3-19/46

TITLE:

Thermal Decomposition of Cellulose and its Structure
(Termicheskiy raspad tsellyulozy i yeye stroyeniye).

PERIODICAL:

Doklady AN SSSR, 1957, Vol. 116, Nr 3, pp. 419-421 (USSR)

ABSTRACT:

The authors derived new knowledges from the study of the decomposition of cellulose which lead to a series of suppositions concerning the mechanism of the decomposition and the structure of cellulose. This was achieved by admitting the reagent to the compositions in more solidified parts. The used material was cotton cellulose prepared in mild conditions according to Corey and Grey. Its degree of initial polymerization was 2800; and 1500 (Sample number 1 and 2), as well as 700 (sample number 3 obtained from sample number 2 by means of a light hydrolysis). The investigation comprised 1) - Performance of the decomposition, 2) - Production and analysis of its products, 3) - determination of the characteristics of cellulose even after its exposure to heating during a certain period. The methodology is described. A temperature of 300°C which permits a considerable yield of levoglucosan with a sufficiently

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Thermal Decomposition of Cellulose and its Structure 20-3-19/46

decelerated process was determined. The results are summarized in table 1. In the case of thermal decomposition of cellulose the degree of polymerization first declines rapidly. The course taken by the curve, varies in each case according to the individual cellulose preparation. After 8 to 10 minutes, a certain critical point is attained in which all 3 curves coincide. With that the degree of polymerization attains a constant value of 200, according to size. With the decomposition continued, only the quantity of cellulose decreases, whereas the molecular weight of the remainder remains stable. Curve 4 describes the dependence of the degree of decomposition of the heating up period. That degree attains 8 to 4 % at the critical point. It is proportional to the heating up period with all samples. Curves 5 and 6, - dependence of the yield of levoglucosan on the heating up period, - show that after the critical value of the period (degree of polymerization approx. 200) has been attained, the yield of levoglucosan increases rapidly for subsequently attaining a constant value. Based upon these new knowledge, the following mechanism of decomposition can be imagined: Chain molecules are torn and fragments with a degree of polymerization of approx. 200 are

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Thermal Decomposition of Cellulose and its Structure 20-3-19/46

accumulated up to the critical point. This signifies that the decomposition takes place first at the periodically placed sections. The dehydration now taking place chiefly, leads to a radical change of the elementary member and to the formation of light volatile products. In the second period (after having exceeded the critical point), the thermal decomposition takes the course of a process of successive chemical conversion of members of the cellulose molecule fragment by splitting up of the elementary member, which, due to an interior isomerization, converts into a monomeric compound, viz.: Levoglucosan. These facts allow the conclusion that the splitting up of the levoglucosan molecule from the chain molecule produces an active center which in return produces an inner isomerization of the following member and the formation of levoglucosan. This process takes place as long as all fragment members are decomposed. The process generated in any chain molecule results thus in the complete decomposition of the molecule. The other molecules remain unchanged in this case. These results prove a periodical structure of the cotton cellulose molecule of sections of various physical structure which

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Thermal Decomposition of Cellulose and its Structure

20-3-19/46

does not only determine the chemical, thermal and physical behavior of the macro-sample of the cellulose, but also the individual molecule of the latter. There are 1 figure, and 2 references, 1 of which is Slavic.

ASSOCIATION: Institute of Silviculture AN USSR
(Institut lesa Akademii nauk SSSR)

PRESENTED: June 29, 1957, by V. A. Kargin, Academician

SUBMITTED: June 29, 1957

AVAILABLE: Library of Congress

Card 4/4

GOLOVA, O.P.; KRYLOVA, R.G.; NIKOLAYEVA, I.I.

Mechanism of the thermal decomposition of cellulose in a vacuum.
Part 1: Comparative study of the thermal decomposition of cotton
cellulose and cellulose hydrate. Vysokom. soed. 1 no.9:1295-1308
S '59. (MIRA 13:3)

1. Institut lesa AN SSSR.
(Cellulose)

5(4)

AUTHORS:

Gatovskaya, T. V., Golova, O. P.,
Krylova, R. G., Kargin, V. A.

SOV/76-33-5-39/44

TITLE:

Investigation of the Sorption Properties of Cellulose in the
Process of Its Thermal Disintegration (Issledovaniye
sorbtsionnykh svoystv tsellyulozy v protsesse yeye termiches-
kogo raspada)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 6, pp 1418-1421
(USSR)

ABSTRACT:

The experimental results of a previous paper (Ref 1) point to
the fact that the process of thermal disintegration of
cellulose (I) in the course of 90 minutes can be divided into
two stages with different peculiarities (Table 1). It is
assumed that the first reaction stage proceeds in less densely
packed (I), whereas in the second reaction stage a higher
packing density prevails and the yield of levoglucosane is
proportional to this density. To investigate the packing
density, a method with the use of sorption isothermals was
applied to the present case. The sorption experiments were
made on one of the investigation samples (Ref 1) of the cellu-

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Investigation of the Sorption Properties of Cellulose S07/76-33-6-39/44
in the Process of Its Thermal Disintegration

lose SP-700 which was heated to 300° for 10, 20, 40 and 90 minutes at $1 \cdot 10^{-5}$ mm Hg. The sorption of the steam by (I) decreases with the time of treatment of (I) to a certain value (20 minutes time of treatment) and then remains constant. This points to a condensation of the (I)-packing by a reduction of its polymerization degree (Ref 5). In the first stage of the thermal (I)-disintegration characterized by a sudden rise in the levoglucosane yield, the maximum condensation of the molecule packing of (I) is attained. In a further disintegration of the basic mass of (I), these values remain constant. Thus, the experimental results confirm the previous statements (Refs 6, 7) that the formation of levoglucosane is considerably influenced by the thermal treatment of (I), i. e. its packing density. There are 2 figures, 2 tables, and 7 references, 6 of which are Soviet.

ASSOCIATION:

Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moskva; Akademiya nauk SSSR, Institut lesa (Physico-chemical Institute imeni L. Ya. Karpov Moscow; Academy of Sciences of the USSR, Forestry Institute)

Card 2/3

Investigation of the Sorption Properties of Cellulose SOV/76-33-6-59/44
in the Process of Its Thermal Disintegration

SUBMITTED: December 28, 1957

Card 3/3

GOLOVA, O.P.; KRYLOVA, R.G.

Thermal depolymerisation of cellulose. Dokl. AN SSSR 135 no.6:1391-1394 D '60. (MIRA 13:12)

1. Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR.
Predstavleno akademikom V.A. Karginym.
(Cellulose)

KOVAL'SKIY, V.V., prof.; LETUNOVA, S.V.; KRYLOVA, M.V.; FARBENOV, V.G.

Cobalt in fish culture, biogenic migration of chemical elements
in ponds. Priroda 54 no.5:69-70 My '65.

(MIRA 18:5)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo
AN SSSR (Moskva).

KRYLOVA, S.I. (Leningrad)

Decembrists and their relation to problems of medical care of
soldiers and the civil population as revealed by P.I. Pestel's
work, "Russian Truth". Sov. zdrav. 20 no.10:68-71 '61.

(MIRA 14:9)

(PUBLIC HEALTH)

(DECMBRISTS)

L 11108-63

PI-4/PO-4/PQ-4 GW

ACCESSION NR: AP3001244

EWI(1)/ECC(w)/ES(v)/BDS

AFFTC/ASD/ESD-3/APGC/SSD Pe-4/

S/0033/63/040/003/0514/0522

80

79

AUTHOR: Divari, N. B.; Krylova, S. N.

TITLE: Photoelectric observations of zodiacal light at a high-altitude station

SOURCE: Astronomicheskii zhurnal, v. 40, no. 3, 1963, 514-522

TOPIC TAGS: zodiacal light, atmospheric optics, photometry

ABSTRACT: Observations of zodiacal light made with violet and green filters at the Tien-Shan station (2000 m above sea level) by means of a specially designed photoelectric photometer. Reviewed. The following formula was used to determine extraterrestrial brightness:

$$I_{obs} = A(z) + L(b)p^{sec z} + R(b, z, p) + ZL(\beta, \lambda)(p + 0.02)^{sec z}$$

where $A(z)$ is the atmospheric component of night airglow; $L(b)$ is the stellar component, i.e., the sky brightness caused by stars and not resolved by the photometer; $R(b, z, p)$ is the light of these stars scattered by the terrestrial atmosphere; and p is the coefficient of atmospheric transparency in the spectral region used. Increasing the coefficient of transparency by 0.02 for zodiacal

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L 11108-63

ACCESSION NR: AP3001244

light accounts for scattering by the terrestrial atmosphere. Brightness variations along and perpendicular to the ecliptic are given in the form of functional dependences. The mean isophotes in the violet and green are seen to correspond to the conical configuration of the zodiacal light. The axis of the zodiacal light is close to the ecliptic but somewhat north of it in the case of small elongations of the isophotal peaks and south of it in the case of large elongations. The color index of zodiacal light in the B-V system was found to be 0.47 ± 0.03 . The color of zodiacal light is believed to be similar to that of the sun. Since no systematic decrease of the color index with increased ecliptical latitude is observed, it is concluded that zodiacal twilight exerts very little influence on the brightness of the zodiacal light. The color index along the almucantar is found to be independent of azimuth. Orig. art. has: 9 tables, 5 figures, and 3 formulas.

ASSOCIATION: Odesskiy politekhnicheskii institut (Odessa Polytechnic Institute)

SUBMITTED: 11Apr62

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: AS

NO REF SOV: 006

OTHER: 006

Card

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L 29267-66 EWT(1)/FCC GN

ACC NR: AP6019304

SOURCE CODE: UR/0203/65/005/004/0777/0780

AUTHOR: Divari, N. B.; Krylova, S. M.

ORG: Odessa Polytechnic Institute (Odesskiy politekhnicheskii institut)

TITLE: Results of photoelectric observations of zodiacal light

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 4, 1965, 777-780

TOPIC TAGS: zodiacal light, photoelectric property

ABSTRACT: Measurements of the brightness of zodiacal light were made at Kamenskoye Plato Observatory, using an electrophotometer. Green and blue glass filters were used for separating out the parts of the spectrum with effective wavelengths at λ 520 and 470 m μ . The diaphragm used cut out a circle in the sky with an area of 13 square degrees. Measured brightnesses were expressed in the number of stars of the tenth magnitude of class G2 per square degree. The brightness of the evening zodiacal light in the northern part of the sky on the average was approximately twice as great as the brightness of the morning zodiacal light. However, in the southern part of the sky their brightnesses virtually coincide. The color of the zodiacal light can be characterized by the value $2.5 \log (I_{\text{green}}/I_{\text{blue}})$. Although along the ecliptic there is reddening of luminescence, there is no basis for assuming that there is a real dependence of the color of zodiacal light on elongation. Using measurements at 156 points of the cone of zodiacal light it was found that $2.5 \log (I_{\text{green}}/I_{\text{blue}}) = -0.027 \pm 0.016$. Since the corresponding value for the sun is zero, it can be concluded that zodiacal light virtually coincides with the color of the sun. Orig. art. has: 4 figures and 8 tables.

SUB CODE: 04 / SUBM DATE: 27Aug64 / ORIG REF: 004

Card 1/1 CC

UDC: 551.593.653

33
B

[JPRS]

DIVARI, N.B.; KRYLOVA, S.N.; MOROZ, V.I.

Polarization measurements of zodiacal light. Geomag. i aer. 4 no.5:
881-885 S-O '64. (MIRA 17:11)

1. Odesskiy politekhnicheskii institut.

KRYLOVA, S.P.

Dispersion properties of three-dimensional periodic structures.

Uch. zap. Novosib. gos. ped. inst. no.18:27-30 '63.

(MIRA 17:10)

AUTHORS

Mikhaylov, G.P., Kabin, S.P.
Krylova, T.A.

57-9-17/40

TITLE

On Dielectric and Mechanical Losses in Low-Pressure Polyethylene.
(O dielektricheskikh i mekhanicheskikh poteryakh polietilena nizkogo davleniya)

PERIODICAL

Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 9, pp. 2050-2055 (USSR)

ABSTRACT

The results obtained by experimental investigation are given. It is shown that $\tan \delta$ of the dielectric losses within the temperature range of from $-110^\circ + 120^\circ\text{C}$ and at frequencies of from 1.5 to 10 kc passes through two maximum domains. A comparison is drawn with the analogous rules for high-pressure polyethylene, and it is shown that the two types of relaxation losses in the case of low-pressure polyethylene belong to the high- and low-frequency relaxation types. Measurements of mechanical losses carried out by the ultrasonic method in dependence on temperature at a frequency of 2 kc proved the existence of only a high frequency relation. Summarizing, it is stated that the following two types of relaxation losses exist:

CARD 1/2

57-9-17/40

On Dielectric and Mechanical Losses in Low-Pressure Polyethylene.

- 1) High frequency losses reflecting the thermal motion of macromolecule components, and
- 2) losses, which reflect the thermal motion of macromolecule parts.

It is assumed that the latter are closely connected with the crystalline degree of the polymer.

There are 4 figures and 9 Slavic references.

ASSOCIATION: Leningrad Polytechnic Institute imeni M.I. Kalinin.
(Leningradskiy politekhnicheskii institut imeni M.I. Kalinina.)

SUBMITTED: March 11, 1957.

AVAILABLE: Library of Congress.

CARD 2/2

DUBROVITSKAYA, N.I.; KRYLOVA, T.A.; FURST, G.G.

Some biological characteristics of banana in greenhouses. Biol.
glav.bot.sada no.43:63-71 '61. (MIRA 15:2)

1. Glavnyy botanicheskiy sad AN SSSR.
(Banana)

L 00740-66 ENT(m)/EPT(c)/T BW/DJ

ACCESSION NR: AP5021990

UR/0286/65/000/014/0065/0065
685.4/.3

AUTHOR: Gerganov, G. Ye.; Vinner, G. G.; Maloletkov, Ye. K.; Bogdanov, Sh. K.;
Sergiyenko, V. G.; Petyakina, Ye. I.; Selivanchik, Ya. V.; Vertilb, Ya. Ye.;
Gusman, M. Ye.; Shamsa, F. Ye.; Smirnov, M. I.; Granat, A. M.; Bulantseva, T. P.;
Krylova, T. A.

TITLE: A method for producing hydraulic fluid: Class 23, No. 172947

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 65

TOPIC TAGS: hydraulic fluid, petroleum product

ABSTRACT: This Author's Certificate introduces a method for producing hydraulic fluid based on petroleum products. The efficiency of the fluid at low temperatures is improved by using a volatile distillate with a flash point of 115-120°C and a viscosity of less than 2200 centistokes at -40°C.

ASSOCIATION: Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi (Scientific Research Institute for Organization, Mechanization and Technical Assistance)

Card 1/2

L 00740-66

ACCESSION NR: AP5021990

SUBMITTED: 14 Aug 64

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: FP

SP
Card 2/2

KRYLOVA, T.B.; BUYEVSKOY A.V. [deceased]; DMITRIYEVA, O.A.

Effect of lignosulfonates on the biochemical processing of
sulfite liquor. *Gidroliz. i lesokhim. prom.* 17 no.6:3-4 '64.
(MIRA 17:12)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M. Kirova.

KRYLOVA, T.B.; BUYEVSKOY, A.V. [deceased]; DMITRIYEVA, O.A.

Effect of the concentration of lignin sulfonate on the frothing capacity of a solution during flotation of distiller's yeasts.
Gidroliz. i lesokhim. prom. 17 no.3:5-7 '64.

(MIRA 17:9)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M. Kirova.

KRYLOVA, T.F., fel'dsher

Work of the collective farm milk kitchen. Zdravookhraneniye 3
no.1:60-61 Ja-F '60. (MIRA 13:6)

1. Zaveduyushchaya molochnoy kukhney kolkhosa "Moldova Sushia-
liste", sela Yaloveny Kotovskogo rayona.
(INFANTS--NUTRITION)

KRYLOVA, T., ^{N.} nauchnyy sotrudnik

Bookkeeping on an hourly basis. Nauka i porod. op. v sel'khoz.
8 no.9:10-11 S '58. (MIRA 11:10)

1. Institut ekonomiki AN SSSR.
(Collective farms--Accounting)

KRYLOVA, T. N.

Practice in accounting for time worked on a collective farm.
Vop.ekon. no.11:145-147 N '58. (MIRA 11:11)
(Collective farms--Accounting)

LAPTEV, I.D., starshiy nauchnyy sotr.; BUYANOV, P.S., starshiy nauchnyy sotr.; KASSIROV, L.N., starshiy nauchnyy sotr.; TERYAYEVA, A.P., starshiy nauchnyy sotr.; SUVOROVA, L.I., starshiy nauchnyy sotr.; SIDOROVA, M.I., starshiy nauchnyy sotr.; SEMIN, S.I., starshiy nauchnyy sotr.; Prinimali uchastiye: ARKHIPOV, A.I., mladshiy nauchnyy sotr.; VAZYULYA, P.F., mladshiy nauchnyy sotr.; KARLYUK, I.Ya., mladshiy nauchnyy sotr.; KAGANUKHOVA, Ye.I., mladshiy nauchnyy sotr.; KYLOVA, T.N., mladshiy nauchnyy sotr.; ROMANOVSKAYA, L.S., mladshiy nauchnyy sotr.; CHISTOV, G.N., mladshiy nauchnyy sotr.; POTAPOV, Kh.Ye., red.; GERASIMOVA, Ye.S., tekhn. red.

[Communal funds of collective farms and the distribution of collective farm income] Obshchestvennye fondy kolkhozov i raspredelenie kolkhoznykh dokhodov. Moskva, Izd-vo ekon. lit-ry, 1961. 386 p. (MIRA 15:3)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Sektor ekonomiki sel'skogo khozyaystva Instituta ekonomiki Akademii nauk SSSR (for Laptev, Buyanov, Kassirov, Teryayeva, Suvorova, Sidorova, Semin).

(Collective farms—Income distribution)

BRUMBERG, Ye.M.; KRYLOVA, T.N.

~~XXXXXXXXXXXX~~
Application of dividing mirrors for interferometry in fluorescent
microscopy. Zh. obsh. biol., Moskva 14 no.6:461-464 Nov-Dec 1953.
(CLML 25:4)

21

21

21

PRIDATKO, G.D.; KRYLOVA, T.M.

Optical properties of laminar interference polarizers. Opt.-mekh.
prom. [25] no.3:23-26 Mr '58. (MIRA 11:9)
(Polarization (Light))

51-4 -2-12/28

AUTHOR: Krylova, T. N.

TITLE: Multilayer Dielectric Coatings with a High Reflection Coefficient on the Surface of Glass. (Mnogosloynnye dielektricheskiye pokrytiya s vysokim koeffitsiyentom otryazheniya na poverkhnosti stekla.)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol.IV, Nr.2, pp.217-224 (USSR).

ABSTRACT: Calculations were carried out of spectral curves of the reflection coefficient of multilayer coatings covering glass surface. Then multilayer coatings were prepared and their spectral characteristics measured. Calculations were carried out graphically and almost all results were checked by an analytic method proposed by Vlasov (Ref.10). The main difference between the values obtained graphically and those calculated using Vlasov's method occur at extrema of the reflection coefficient, particularly at maxima. Fig.1 gives the results of the analytic method (continuous curves) and the approximate graphical method (dashed curves) for the reflection coefficient on glass covered by: (1) one layer with a refractive index 2.2 and (2) three layers with refractive indices 2.2, 1.45

Card 1/4

51-4-2-12/28

Multilayer Dielectric Coatings with a High Reflection Coefficient on the Surface of Glass.

and 2.2. Graphs were obtained (Figs.2 and 3) for three-layer and eleven-layer coatings (with the refractive indices 2.2 and 1.45) on glass with the refractive index 1.52. For convenience in use the graphs were recalculated and are shown in Fig.4 as dependences of the reflection coefficient on phase angle for one, three, five, seven, nine and eleven layers respectively (curves 1-6). A table on p.221 gives the results of calculation of the maximum values of the reflection coefficient of glasses coated with from one to eleven layers. This table shows that the properties of the glass substrate affect strongly the one-layer coating but are not important in five-layer and thicker coatings. Calculations of the reflection coefficient curves for glass with multilayer coatings show that positions of the main reflection maxima correspond to wavelengths for which the optical thickness of one layer is an odd multiple of one quarter of the wavelength, i.e. they correspond to phase angles of 180° , 540° etc. The number of secondary maxima which occur between the main

Card 2/4

51-4 -2-12/20

Multilayer Dielectric Coatings with a High Reflection Coefficient on the Surface of Glass.

maxima, is equal to $n - 1$ for a coating consisting of n layers. The equality of heights of the secondary maxima on both sides of the main maximum is a sensitive criterion of uniformity of thickness of the layers composing the coating. Multilayer coatings consisting of up to eleven layers were prepared from titanium and silicon dioxides by deposition from alcohol solutions of ethyl esters of orthotitanic and orthosilicic acids with subsequent drying at 350°C . The refractive indices of titanium and silicon dioxides are 2.2 and 1.44-1.45 respectively. Figs.5-7 show the reflection coefficient of glass covered with three, seven and eleven layers of titanium and silicon dioxides (these two oxides are deposited alternately one on top of the other). The continuous curves are calculated graphically and points (circles) were obtained experimentally. These figures show satisfactory agreement of experimental and calculated curves. The differences between the calculated and experimental curves are ascribed to non-uniformity of thickness of the layers deposited. Layers with

Card 3/4

51- 4-2-12/23

Multilayer Dielectric Coatings with a High Reflection Coefficient on the Surface of Glass.

1000-2000 Å optical thickness can be reproduced by deposition under identical conditions with an accuracy of ± 50 Å. This makes it possible to obtain the reflection coefficient curves with reproducibility of 100-200 Å. The coatings made of titanium and silicon dioxides were found to be stable and resistant under rubbing and cleaning with organic solvents. There are 7 figures, 1 table and 20 references, of which 5 are Soviet, 3 English, 4 American, 3 French, 3 German, 1 Czech and one other.

ASSOCIATION: State Optical Institute imeni S.I. Vavilov.
(Gos. opticheskiy institut im. S.I. Vavilova.)

SUBMITTED: April 19, 1957.

1. Dielectric coatings-Spectrographic analysis
2. Glass-Reflection properties-Effects of dielectric coatings
3. Dielectric coatings-Reflection properties

Card 4/4

24(4)

SOV/51-6-6-11/34

AUTHOR: Krylova, T.N.

TITLE: Interference Light-Filters Made of Multilayer Dielectrics
(Interferentsionnyye svetofil'try iz mnogosloynnykh dielektrikov)

PERIODICAL: Optika i spektroskopiya, 1969, Vol 6, Nr 6, pp 784-787 (USSR)

ABSTRACT: The author has shown (Ref 8) that coatings of alternating layers of titanium dioxide and silicon dioxide (prepared from alcohol solutions of easily hydrolysed ethyl esters of orthotitanic and orthosilicic acids) increase reflection from glass surfaces from 4% to 90% and higher in the spectral region from 380 to 1200 mμ. Such coatings are stable and mechanically strong. These coatings can be used to prepare interference filters with narrow transmission bands. One such filter, consisting of fifteen layers, is shown in Fig 1. It is made up of a coating of seven alternating layers of titanium dioxide and silicon dioxide, of optical thickness $\lambda/4$ each, a layer of silicon dioxide of optical thickness $\lambda/2$, and a second seven-layer coating identical with the first. The optical thickness of the layers determines the region in which the transmission band occurs. Fig 1 shows the transmission coefficients of filters with seven layers (curve 1), eleven layers (curve 2) and fifteen layers (curve 3). The fifteen-layer filter passes up to 18% of light in the region of 530 mμ; its transmission band half-width is 10 mμ. In the regions of 500 and

Card 1/3

SOV/61-6-6-11/34

Interference Light-Filters Made of Multilayer Dielectrics

600 mμ curve 3 has a background of about 2% but beyond these regions (in both directions) the transmission coefficient rises sharply to reach secondary maxima. These secondary maxima are eliminated by additional filters of coloured glass. Other filters with narrow transmission bands in the region 380-600 mμ were prepared from 7-layer coatings and had properties similar to those represented by curve 3 of Fig 1. Transmission properties of such filters are shown in Fig 2 and the table on p 786; the transmission-band width is seen to increase with the wavelength at which this band occurs. The author prepared also a filter in which the intermediate layer was a dielectric with a high refractive index (titanium dioxide) placed between two coatings consisting of six layers each. The transmission curve of such a filter is shown in Fig 3 (curve 4). The filter passes from 80% of light in the region of 700 mμ; its transmission half-width is 28 mμ and the background outside the transmission band is 8-10%. Coloured glass KS17 and multi-layer interference beam splitters were used to eliminate secondary

Card 2/3

Interference Light-Filters Made of Multilayer Dielectrics

SOV/51-6-6-11/34

maxima and lower the background of this filter. The final filter (Fig 3, curve 5) passes 56% of light (transmission half-width 23 mμ, background of the order of 0.1%). Filters for longer wavelengths were made of two 5-layer coatings with a separating layer of silicon dioxide. To decrease the background two identical filters were used together; their transmission is shown by curve 6 in Fig 3. Such a filter passes more than 80% light in the region of 850 mμ (transmission half-width 35 mμ, background 2-5%). In conjunction with coloured glass, FS7 and KS15 the latter filter has a transmission of 50%, with a negligible background and a transmission half-width of 30 mμ (Fig 3 curve 7). There are 3 figures, 1 table and 9 references, 2 of which are Soviet, 1 French, 2 English, 3 German and 1 Danish.

SUBMITTED: June 11, 1958

Card 3/3

24(4)

SOV/51-6-6-12/34

AUTHORS: Sokolova, R.S. and Krylova, T.N.

TITLE: Interference Filters for the Ultraviolet Region of the Spectrum
(Interferentsionnyye fil'try dlya ul'trafioletovoy oblasti spektra)

PERIODICAL: Optika i spektroskopiya, 1969, Vol 6, Nr 6, pp 770-791 (USSR)

ABSTRACT: The chemical method of producing coatings by deposition from easily hydrolyzed solutions yields strong chemically stable films of thorium dioxide (refractive index 2.0) and silicon dioxide (refractive index 1.45) transparent in the ultraviolet region 200-400 nm. Using these films multilayer beam-splitters and interference filters with a narrow transmission band were produced. Beam-splitters for the ultraviolet region were made by alternate deposition of thorium dioxide and silicon dioxide films, of optical thickness $\lambda/4$, on a fused-quartz plate. A beam-splitter consisting of 11-15 layers reflects, at its maximum, 90-95% of the incident light; position of the maximum is determined by the optical thickness of the layers. Spectral characteristics of some beam-splitters are shown in Fig 1, which gives the values of the spectral transmission coefficient measured by means of a photoelectric spectrophotometer. Fig 1 shows that the width of a band with high reflection, where transmission does not exceed 5%, is of the order of $\lambda/6$

Card 1/3

SOV/51-6-6-12/34

Interference Filters for the Ultraviolet Region of Spectrum

to $\lambda/8$. On both sides of the transmission minimum the curves rise sharply and the transmission coefficient reaches quickly values of the order of 80-90%. Using several beam-splitters, one can make filters with various properties. The interference filters for the ultraviolet region, prepared by the authors, were of two types. In filters of type I an intermediate layer of $\lambda/2$ thickness of silicon dioxide is placed between two 7-layer coatings consisting of alternate layers of thorium dioxide and silicon dioxide. In filters of type II an intermediate thorium dioxide layer of $\lambda/2$ thickness is placed between two 6-layer coatings. Fig 3 shows the transmission spectra of three filters. Filter No. 2 which is of type I, transmits 72% of light in the region of 280 m μ and the half-width of the transmission band is equal to 6 m μ . Filter No. 3 is of the II type: its transmission band lies in the region of 370 m μ and its half-width is 12 m μ : its transmission maximum is ~90%. The background in filters Nos. 2 and 3 varies between 6 and 10%. Curves 2a and 3a in Fig 3 show the transmission coefficients of the filters Nos. 2 and 3 respectively, each combined with coloured glass which removes the secondary maxima. To decrease the background in the region 300-400 m μ the authors used multilayer beam-splitters described above. A combined filter No. 2 includes glass UFS-1 and four beam-splitters; its transmission maximum is now 30% and the transmission band half-width is reduced

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SOV/61-6-6-12/34

Interference Filters for the Ultraviolet Region of Spectrum

to 8 mμ (curve 2a in Fig 3). Filter No. 3, combined with glasses NS-1 and SZS-10, transmits 57% and its half-width is 12 mμ (curve 3a in Fig 3). No glasses were available which could be used to remove the secondary maxima in the region 230-250 mμ. The transmission band of a filter working in this region is shown by curve 1 in Fig 3; it transmits 27% at 230 mμ and its transmission band half-width is 8 mμ. The table on p 791 gives the properties of several filters with transmission bands in the region 230-400 mμ. Filters of the I type work in the region 230-300 mμ and those of the II type work in the region 300-400 mμ. Using coloured glass and beam-splitters the background in the visible region up to 690 mμ (and sometimes up to 1 μ) could be removed. Filters of alternate thorium dioxide and silicon dioxide layers were found to be stable and they did not require protection from the action of atmospheric air. There are 3 figures, 1 table and 11 references, 4 of which are Soviet, 3 English, 2 German, 1 French and 1 Dutch.

SUBMITTED: July 10, 1958

Card 3/3

84689

9.4/60 (3201, 1105, 1137)
243000 1130, 1138, 1051

S/051/60/009/005/010/019
E201/E191

AUTHORS: Krylova, T.N., and Bagdyk'yants, G.O.

TITLE: A Study of the Optical Properties and Structure of
Titanium Dioxide Layers

PERIODICAL: Optika i spektroskopiya, 1960, Vol.9, No.5, pp 644-647

TEXT: Thin layers of titanium dioxide are widely used in optics and elsewhere. Titanium dioxide occurs naturally in two crystal forms: anatase and rutile. Layers of titanium dioxide produced by hydrolysis of titanium tetrachloride or by other chemical means are usually amorphous. The present paper describes a study of the optical properties and structure of amorphous titanium dioxide layers prepared from $Ti(OC_2H_5)_4$ solutions. The authors measured the reflection coefficient (R) as a function of wavelength and layer thickness (0.15-1 μ) in the visible region. Curves 1 and 2 in Fig. 1 show the spectra of layers with optical thicknesses of 4300 and 3500 \AA . Layers which were denser in the optical sense could be prepared by successive deposition (curve 3 shows the reflection spectrum of such a composite layer). Fig. 2 gives the dispersion curves (refractive index against wavelength)

Card 1/2

84689

S/051/60/009/005/010/019
E201/E191

A Study of the Optical Properties and Structure of Titanium Dioxide Layers

for layers produced from dilute (curves 1 and 2) and concentrated (curve 3) solutions. The refractive indices plotted in Fig. 2 were calculated from the reflection coefficient R. Fig. 2 gives also de Vore's (Ref. 1) and Hass's (Ref. 6) results for mono-crystals of rutile and anatase (curves 4 and 5 respectively). Curve 6 represents $TiCl_4$ layers dried at 300 °C. The temperature dependence (100-900 °C) of the refractive index in the 500-550 mμ region (Fig. 3) and the temperature dependence of the electron-diffraction patterns (Fig. 4 and a table on page 647) show that the layers begin to crystallize as anatase at 300-350 °C. There are 4 figures, 1 table and 8 references: 5 Soviet, 2 English and 1 French.

SUBMITTED: February 27, 1960

Card 2/2

KRYLOVA, T.N.

Optical properties of interference antireflection coatings.

Zhur.nauch. i prikl. fot.i kin. 6 no.6:462-475 N-D '61.

(MIRA 15:1)

(Photographic optics)

38522

S/051/62/012/006/013/020
E032/E414

24 2950

AUTHORS: Sokolova, R.S., Krylova, T.N.

TITLE: Multilayer light beam splitters consisting of layers of unequal optical thickness

PERIODICAL: Optika i spektroskopiya, v.12, no.6, 1962, 772-778

TEXT: Previous work (ONTI, 1956; Opt. i spektr., v.4, 1959, 217; Tr. GOI, v.24, no.145, 1956, 159) has shown that the spectral curve of the reflection coefficient for a multilayer beam splitter consisting of layers of equal optical thickness contains a number of principal maxima and several secondary maxima located symmetrically relative to the latter. The secondary maxima may reach 40% or more. It is now shown that the height of these subsidiary maxima may be considerably reduced if the layers are not equal in thickness. In order to investigate this in detail the authors have computed the spectral curves for 3 to 11 layer beam-splitters consisting of alternate layers of thorium dioxide ($n = 2.0$) and silicon dioxide ($n = 1.45$) on a fused quartz base ($n = 1.46$). The calculations were based on the recurrence method put forward by I.V.Grebenshchikov, A.G.Vlasov and B.S.Neporent

Card 1/2

Multilayer light beam ...

S/051/62/012/006/013/020
E032/E414

(Prosvetleniye optiki, GITTL. M.-L., 1946). The computed curves were then verified experimentally. It was found that the subsidiary maxima could be reduced by a factor of 4 without affecting the height of the principal maxima. The optical thickness ratios for the alternate layers which were used were 1.5:1, 2:1, and 3:1. It was found that the addition of a $\lambda/8$ layer with a low refractive index on top of the usual equal-thickness beam-splitters gives rise to an effective reduction in the optical thickness of the layers with the higher refractive index. There are 7 figures.

SUBMITTED: April 21, 1961

Card 2/2

S/051/63/014/003/011/019
E039/E120

AUTHORS: Sokolova, R.S., and Krylova, T.N.

TITLE: Interference polarizers for the ultraviolet region of the spectrum

PERIODICAL: Optika i spektroskopiya, v.14, no.3, 1962, 401-405.

TEXT: The degree of polarization in reflected and transmitted light is given by:

$$\frac{R_s - R_p}{R_s + R_p} \quad \text{and} \quad \frac{T_s - T_p}{T_s + T_p}$$

where R_p , R_s , T_p and T_s are coefficients of reflection and transmission for parallel and perpendicular components. Hence for 100% polarization in reflected light the parallel component must be eliminated, which is only possible by keeping strictly to the Brewster angle condition. Two systems are investigated: a cubic polarizer with angle of incidence of light on the coating equal to 45° , and a system of two right angled quartz prisms with strict adherence to the Brewster angle condition.

Card 1/2

Interference polarizers for the ... S/051/63/014/003/011/019
E039/E120

Thorium dioxide with a refractive index $n = 2$ and silicon dioxide $n = 1.45$ are used to form the alternate $\lambda/4$ layers and 3, 5, 7, 9, 11 and 13 layer systems are investigated. The maximum value of reflection coefficient for the perpendicular component increases quickly with increase in number of layers and approaches unity in the 11 and 13 layer coatings. There is at the same time a broadening in the wavelength range for high reflectivity, i.e. from 20 μ for 3 layers to 90 μ for 13 layers. It is shown that polarizers possessing a high degree of polarization ($> 99\%$) can be made with a light transmission of about 40% in the range 300 - 400 μ , and about 35 - 40% in the range 250 - 300 μ . A combination of two coatings with maximum polarization in different parts of the spectrum enables a high degree of polarization to be attained in the region 250 to 400 μ . There are 7 figures and 1 table.

SUBMITTED: May 18, 1962

Card 2/2

ACC NR: AP6017973

SOURCE CODE: UR/0413/66/000/010/0073/0073

INVENTORS: Baranov, V. K.; Protasov, N. N.; Krylova, T. N.; Suyetin, V. F.

ORG: none

TITLE: A method for preparing a selectively reflecting mirror. Class 32,
No. 181792

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 73

TOPIC TAGS: zinc compound, magnesium compound, nickel, chromium, titanium compound,
silicon compound, mirror, radiation

ABSTRACT: This Author Certificate presents a method for preparing a selectively reflecting mirror. The method involves consecutive deposition of the interference layers of zinc sulfide and magnesium fluoride, or of titanium dioxide and silicon dioxide onto the underside of the interference layers. To absorb radiation passed by the interference coating, the metallic undercoat is previously covered with an absorbing layer of rough nickel or of rough chromium.

SUB CODE: 20//

SUBM DATE: 25Mar65

Card 1/1

UDC: 666.1.056

KRYLOVA, T.P.

Introducing guillotine shears with a pneumatic drive. Biul.
tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn.
inform. 18 no.7:48-49 J1 '65. (MIRA 18:9)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000826910001-4

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000826910001-4"

with which we are expected to be able to
we are expected to be able to
Growth of the system is expected to be
not found down to 100% of the system's capacity.

KRYLOVA, T.V. (L'vov)

The functional condition of the liver in rheumatic children treated with ACTH [with summary in English]. Probl.endok. i gorm. 4 no.2:88-91 Mr-Apr '58 (MIRA 11:5)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva (dir. - I.D. Yashchuk, nauchnye rukovoditeli - dotsent I.M. Rudnev i kandidat biologicheskikh nauk N.A. Zemtsova).

(ACTH, therapeutic use

rheum.heart dis. & rheum. fever in child, eff. on liver funct. (Rus))

(LIVER, physiology

eff. of ACTH ther. of rheum. heart dis. & rheum. fever in child. (Rus))

(RHEUMATIC HEART DISEASE, therapy

ACTH, eff. on liver funct. in child. (Rus))

(RHEUMATIC FEVER, therapy

ACTH, eff. on liver funct. in child. (Rus))

KRYLOVA, T. V., Cand Med Sci -- "Functional state of the
liver ⁱⁿ in rheumatism of children." ^{L'vov, 1961.} (Min of Health UkSSR.
L'vov State Med Inst) (KL, 8-51, 262)

- 480 -

1. KRYLOVA, U. M.
2. USSR (600)
4. Leather, Artificial
7. How we achieved excellent work indexes. Leg. prom. no. 12, 1952

Monthly Lists of Russian Accessions, Library of Congress, March, 1953, Unclassified.

KRYLOVA, V.

Inspection of freight trucks on the roads of White Russia. Avt.
transp. 38 no. 5:36-38 My '60. (MIRA 14:2)
(White Russia--Transportation, Automotive--Freight)

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.; KRYLOVA, V.G.

Effect of deoxyribonucleic acid and diisopropyl
fluorophosphate on the polarographic wave of subtilisin.
Dokl. AN SSSR 146 no.4:941-944 0 '62. (MIRA 15:11)

1. Institut biokhimii im. A.N. Bakha AN SSSR.
Predstavleno akademikom A.I. Oparinym.
(Subtilisin) (Nucleic acids) (Phosphates) (Polarography)

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.; KRYLOVA, V.G.

Polarography of trypsin in the presence of a substratum and
an inhibitor during irradiation with ultraviolet light. Ukr.
biokhim.zhur. 34 no.5:678-687 '62. (MIRA 16:4)

1. Institut biokhimi im. A.N.Bakha AN SSSR.
(TRYPSIN) (ULTRAVIOLET RAYS) (POLAROGRAPHY)

IVANOV, I.D.; RAKHLEYEVA, Ye.Ye.; KRYLOVA, V.G.

Polarographic wave and catalytic activity of chymotrypsin
in the presence of a substrate, inhibitor, and DNA in the
process of irradiation with ultraviolet light. Ukr.biokim.
zhur. 34 no.6:853-862 '62. (MIRA 16:4)

1. A.N.Bach Institute of Biochemistry of the Academy of Sciences
of the U.S.S.R.

(CHYMOTRYPSIN) (ULTRAVIOLET RAYS) (POLAROGRAPHY)

NAZAROV, M.S.; OVSYANNIKOV, N.G.; SOYUZOV, A.A.; MITAISNVILI, A.A.;
YUDIN, P.G.; SOLOV'YEV, I.F.; SVIRIDOV, A.A.; RUMYANTSEV, S.M.;
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